Washburn-Crosby Milling Complex,
Wheel House
711-719 South First Street
Minneapolis
Hennepin County
Minnesota

HABS No. MN-69-E

HABS
MINN,
27-MINAP,
20-E-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

HABS
MINN,
27-MINAP
20-E-

HISTORIC AMERICAN BUILOINGS SURVEY

WASHBURN-CROSBY MILLING COMPLEX,
WHEEL HOUSE

HABS No. MN-69E

Location: 711-719 South First Street, Minneapolis, Hennepin County, Minnesota

USGS Minneapolis South Quadrangle, Universal Transverse Mercator Coordinates: Zone 15; 479740:4980480; 479860:4980420; 479820:4980360; 479700:4980400

Present Owner: Riverside Industries, Inc.
P.O. Box 1125
Minneapolis, Minnesota 55440

Present Occupant: Leased by General Mills, Inc.
Minneapolis, Minnesota

Present Use: Not Used

Significance: The Wheel House is a part of the larger Washburn-Crosby Milling Complex, one of the last surviving milling complexes on the Mississippi River, which gave rise to Minneapolis' title of flour milling capital of the world in the late 19th and early 20th century. It is one of a series of wheel houses built on the site to provide water power for machinery in the mills. Two water wheels were located below the building and received water from the canal under South First Street. The power generated was used to run the mill until 1960 when the canal was filled in.

PART I. HISTORICAL INFORMATION See HABS No. MN-69 for general information.

A. Physical History:

1. Date of erection: 1911, Building Permit #A11439, dated August 7, 1911 was taken out by Washburn-Crosby Co.

2. Architects: Unknown.

3. Original and subsequent owner: The Wheel House was originally built by and for the Washburn-Crosby Company, which later became General Mills, Inc.

4. Builder, contractor, suppliers: Minneapolis Building Permit #A11439 was issued to Washburn-Crosby Co. on August 7, 1911 for a brick and reinforced concrete wheel house and locker room. It called for metal frames, sash and wire glass with dimensions of 31 feet 6 inches wide, 31 feet deep and 42 feet high with 2 stories. According to notes and information found the building was constructed by day labor.

5. Original plans and construction: Unknown.

6. Alterations and additions: Plans indicate that a major remodeling was proposed in 1918, 1920 and 1921. This remodeling proposed to rework the wheel pits from 3 to 2 and install a 300 K.V.A. generator. Apparently the power generated at this location was for the Humboldt Mill and fire pumps.

   An 8 x 18 foot stairway was brought down along the east facade of the "A" Mill into the Wheel House during the rebuild after the 1928 fire in the "A" Mill. It is located about 8 feet from the north face of the Wheel House. The stairway is enclosed, its exterior finished in a cream colored stucco. There is a window to the north on the third floor and a door and window on the top floor. This corresponds to the roof of the "A" Mill. From the door an unenclosed stairway spans across the Wheel House to the top of the Feed Elevator.

   All but one of the original windows appear to have been filled in or altered in some way.

B. Historical Context:

The Wheel House originally fronted the First Street Canal providing power to the Washburn-Crosby Milling Complex until 1960 when the canal was filled in. It was one of a number of wheel pits located on the site. The footprint of the building shows up in various configurations over the years, sometimes including the smoke stack behind it, built in 1894 for the East Boiler House, and sometimes not. The East Boiler House originally stood to the east of the Wheel House, about 10 feet away, explaining the fenestration on the east facade. The Feed Elevator replaced the Boiler House in 1928.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The Wheel House, built in the period of the consolidation of the flour milling industries, is a utilitarian building with a single purpose of providing power to the Washburn-Crosby Milling Complex and the Humboldt Mill. Scattered openings and simple brick detailing attest to its industrial value.

2. Condition of fabric: Although repeated alterations to the exterior skin have been made, as well as mechanical alterations, the building appears structurally sound. The windows to the north are broken, but it is otherwise climatically sealed.

B. Description of Exterior:

1. Overall dimensions: The building is approximately 31 feet square and 25 feet high. It is two stories with a second level that contains locker rooms and a basement level that opens onto First Street South (to the north). The rear of the Wheel House is a one story high building with the remains of iron smokestack in the southwest corner.

2. Foundations: The building appears to rest on a reinforced concrete foundation 15 inches thick. Two wheel pits are found in the subbasement. A tail race leads off joining up with the tailrace from the "A" Mill before flowing into the west side main tailrace. A tunnel running south from the southeast end of the building connects the Wheel House to the rest of the complex.

3. Walls: The walls are of red brick 12 inches thick with common running bond. The surface is flat, with no decorative coursing except for the cornice. Two window openings on the second floor and one on the first floor are spanned by segmental brick arches. The original brick sills are still in place in only one of the windows.

   Three openings on the basement level are spanned with low arches which have been filled in to accommodate two doorways and one small window. Four segmentally arched window openings are found on the east elevation with original brick sills, but are blocked from view by the Feed Elevator.

4. Structural system, framing: According to the 1912 Sanborn Insurance Map it is of fireproof construction except for exposed steel.

5. Porches, stoops, balconies, bulkheads: A green metal emergency stairway and landing for the second story exit projects off the facade, supported from below with metal bracing. It is of utilitarian design with an open grate floor. A metal walkway of similar industrial design is hung from the face of the north elevation from metal hangers off the middle of the facade, at the bottom of the emergency stairway.

6. Chimneys: None.

7. Openings:

a. Doorways and doors: One green and one white metal door are found in the openings on the basement level. They are not original and have been fitted into the openings with concrete block infill. One second story window opening has been altered to become an exit door. A metal door and stairway have been inserted and the opening above bricked in. All doors are of industrial design with metal trim and hardware.

b. Windows and shutters: The original two over two double hung sash windows with wire glass glazing are still in place in the east facade and in one window on the north facade. They are painted green with metal trim and were protected with iron shutters according to the 1912 Sanborn Insurance Map. On the north side a six over four sash window has been installed on the first level and a glass block window has been installed in one of the basement openings.

8. Roof:

a. Slope, coverings: The roof is flat with a 12 inch brick parapet around the north and east sides. The roofing is of a composition material.

b. Cornice, eaves: A simple brick cornice runs around the north and east sides. The profile is typical of industrial buildings with vertical brackets of corbelled brick across the top. Its pattern is interrupted by the window openings.

C. Description of Interior:

1. Floor plans:

a. The lower level contains the wheel pit. The pit originally contained 3 wheels. These wheels were used for power for the Humboldt and the "A" Mill. In 1920 there was a proposal to reconstruct the pit to contain 2 wheels. There is no documentation to determine whether this was carried out. According to stories told by former workers there is also a small "stream" running through the lower level where workers would put their beer to cool in the summer.

b. The upper level contained a locker room that was used by the employees of the mill. There is no documentation of any major changes to this room other than the construction of a fire stair being built to the "A" Mill after the 1928 fire.

O. Site:

1. General setting and orientation: The Wheel House is northeast of the "A" Mill and immediately adjacent to the east side of the mill. Its north facade faces First Street South and the Mississippi River beyond and is aligned with the north face of the "A" Mill. The Feed Elevator stands to the east separated from the Wheel House by about three feet. This blocks the view of the east elevation from the street.

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings: The following plans are available at General Mills, Inc., Corporate Engineering, James Ford Bell Technical Center, Minneapolis, Minnesota.

Dwg. No.	Description	Date
23713-1	Changes in Humboldt Pit-Water Power	7-1-18
23891-1	Water Power Light Wheel Drive Layout	4-19-20
23891-2	Water Power Wheel House Present Install.	4-20-20
23891-3	Water Power Wheel House 1500 KW Gen. Pro.	8-7-20
23940-1	Lighting Plant Plan & Section of Pump House	3-3-21
23940-1	(back side) Worksheet	
23940-1	Preliminary Lighting Plant Plan & Section ...	3-3-21
113940-2	Lighting Plant A Mill Pump House Prop.	4-21-21
113940-3	Lighting Plant A Mill Pump House Prop.	4-22-21
112940-4	Lighting Plant A Mill Pump House Prop.	4-22-21
113-946	Wheel Pit A Mill Pump House	4-16-21

B. Early Views: The early panoramic view do not show the Wheel House. A 1945 photographs from the General Mills Archives, Minneapolis, Minnesota shows the Wheel House.

C. Interviews:

Mr. Don Noel, Millright
3727 Rhode Island Avenue South
St. Louis Park, Minnesota 55426
(612) 938-5556

Mr. Bill Praus, Estimator, Coordinator
General Mills, Inc.
7232 Oakland Avenue South
Richfield, Minnesota
(612) 866-9053

Mr. Walt Langley
Building Superintendent
Riverside Industries, Inc.
P.O. 8ox 1125
Minneapolis, Minnesota 55440

D. Bibliography:

1. Primary and unpublished sources:

Department of Inspections
City of Minneapolis
Building Permit Files 1884-1973

Archives
General Mills, Inc.
9200 Wayzata Boulevard
Golden Valley, Minnesota 55426

Corporate Engineering
James Ford Bell Technical Center
General Mills, Inc.
9000 Plymouth Avenue
Golden Valley, Minnesota 55424

Ben Miller
Riverside Industries, Inc.
P.O. Box 1125
Minneapolis, Minnesota 55440

Draft nomination, National Register of Historic Landmarks, Washburn-Crosby A Mill Complex.

2. Secondary and published sources:

A GUIDE TO THE INDUSTRIAL ARCHEOLOGY OF THE TWIN CITIES, The Society for Industrial Archeology of St. Paul, Minnesota Historical Society, 1983.

AMERICAN MILLER. p. 124 and 125, June 1878 THE MINNEAPOLIS HORROR.

Anfinson, Scott F., ARCHEOLOGICAL POTENTIALS ON THE WEST SIOE OF THE CENTRAL MINNEAPOLIS WATERFRONT. St. Paul, Minnesota; Minnesota Historical Soceity, 1984.

EVENTUALLY NEWS, General Mills, Inc., Vol. 1 #1, 10/29/19, Vol. 1 #27, 4/28/20,

Fuller, M.A., MAP OF THE MANUFACTURING INTERESTS AT THE FALLS OF ST. ANTHONY. A.J. Reed, Lithographer, St. Paul, Minnesota, 1873.

Kane, Lucille M., THE WATERFALL THAT BUILT A CITY. St. Paul, Minnesota Historical Society, 1966.

Kane, Lucille and Ominsky, TWIN CITIES - A PICTORIAL HISTORY, Minnesota Historical Society.

RASCHER INSURANCE MAPS OF MINNEAPOLIS, Chicago, Map Publishing Company, 1890, 1892.

SAINT ANTHONY FALLS REDISCOVERED. James Berman, ed., Minneapolis: Riverfront Oevelopment Coordination Board, City of Minneapolis, 1980.

SANBORN INSURANCE MAPS OF MINNEAPOLIS, New York: Sanborn Insurance Company, 1885, 1904, 1912, 1949.

Prepared by:
Lorene Lehmann,
Jill Fuerstneau and
Ben Metzdorff
University of Minnesota
March 1986

PART IV. PROJECT INFORMATION

This project was prepared as a class project for Architecture 5142, Historic Building Research and Oocumentation, a class offered in the School of Architecture and Landscape Architecture at the University of Minnesota, Minneapolis, Minnesota. The class project was prepared under the direction of Professor Foster W. Dunwiddie in cooperation with the State Historic Preservation Office of the Minnesota Historical Society, Saint Paul, Minnesota. Historical data was compiled by Lorene Lehmann, Jill Fuerstneau, and Ben Metzdorff, University of Minnesota, March 1986.